

inside:

93 days to Rio and counting

Sustainability needs cities

a multi-stakeholder  
magazine on  
climate change  
and sustainable  
development

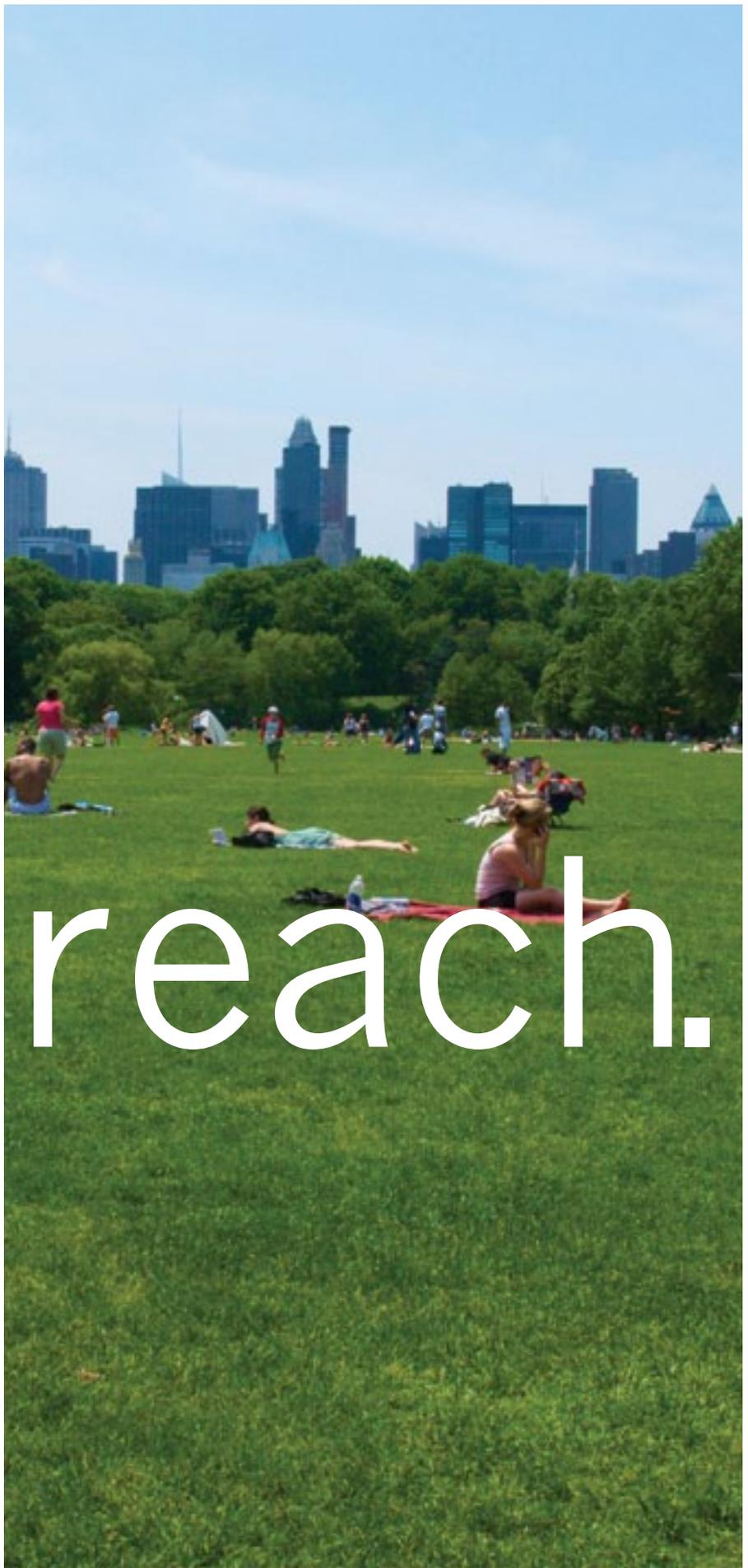
# outreach.

19 March 2012



**RIO+20**  
United Nations  
Conference on  
Sustainable  
Development

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pic: Ed Yourdon

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## Note from the Editor

With only 93 days to Rio, the next week and a half of negotiations will prove vital to how the discussions are framed in June. Over the next three months, the Outreach team will be tracking the negotiations, engaging stakeholders, covering events and gathering articles, to provide rich daily insights for those attending the negotiations and those following from afar.

To help us target certain hot topics and timely discussions, we will be loosely basing each edition around a series of themes. The March themes are linked either to events held around the negotiations, or to some of the central topics tackled in the discussions. We would like to invite our readers to contribute, either over the next 9 days, in the coming April/ May meetings, and finally, of course, at Rio itself in June.

Below is the list of daily themes, with content deadlines. If you are interested in contributing, then do contact the Outreach Editors, myself and Amy, for more information.

Meeting	Dates for Distribution	Themes	Deadline for Content (4pm EST each day)
First round of 'informal-informal' negotiations on the zero draft of outcome document	Monday, 19th March	Green Cities	Today's edition
	Tuesday, 20th March	Global Transition	Monday, 19th March
	Wednesday, 21st March	Dialogue on Corporate Social Responsibility and Accountability	Tuesday, 20th March
	Thursday, 22nd March	Sustainable Development Goals (SDGs)	Wednesday, 21st March
	Friday, 23rd March	Planetary and Social Boundaries	Thursday, 22nd March
3rd Intersessional Meeting of UNCSD, UN Secretariat	Monday, 26th March	Institutional reform	Friday, 23rd March
	Tuesday, 27th March	Planet Under Pressure	Sunday, 25th March

Today's edition focuses on Green Cities - the hubs for ideas, commerce, culture, science, productivity, social development and much more. Discussions for this edition started last week at the 3rd Earth Debate on Green Cities, which engaged audiences in over 7 countries through a live webcast and questions through Twitter. Held at London's historic Natural History Museum, the debate threw up some fascinating insights, such as using the London Olympics to kick start long-term sustainability strategies and the idea

of cities potentially being a rich environment to cultivate ecosystems. These viewpoints were balanced with articulation of the intensely complex challenge of first defining what is meant by a green city, and then deciding how to achieve this utopia. Insights from two of the panellists, Paul Toyne and Thomas Elmqvist, are included in this edition and a recording of the debate will be available from 20 March 2012 at [www.nhm.ac.uk/nature-online/biodiversity/earth-debates/green-cities/index.html](http://www.nhm.ac.uk/nature-online/biodiversity/earth-debates/green-cities/index.html) ■

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### OUTREACH IS PUBLISHED BY:



#### About Stakeholder Forum

Stakeholder Forum is an international organisation working to advance sustainable development and promote democracy at a global level. Our work aims to enhance open, accountable and participatory international decision-making on sustainable development through enhancing the involvement of stakeholders in intergovernmental processes. For more information, visit: [www.stakeholderforum.org](http://www.stakeholderforum.org)

Outreach is a multi-stakeholder publication on climate change and sustainable development. Outreach is the longest continually produced stakeholder magazine in the sustainable development arena and has been produced at international meetings on the environment, including the UN Commission on Sustainable Development (CSD) and at COP15 and COP16. Published as a daily edition, in both print and web form, Outreach provides a vehicle for critical analysis on key thematic topics in the sustainability arena as well as a voice of regional and local governments, women, indigenous peoples, trade unions, industry, youth and NGOs. To fully ensure a multi-stakeholder perspective, we aim to engage a wide range of stakeholders for article contributions and project funding.

If you are interested in contributing to Outreach, please contact the team ([gmacdonald@stakeholderforum.org](mailto:gmacdonald@stakeholderforum.org))  
You can also follow us on Twitter: @OutreachLive

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# 93 days to Rio and counting – our call for action

Felix Dodds

Executive Director, Stakeholder Forum

Last week we reached the daunting milestone of 100 days until the Rio+20 Summit. With time running out, it is now up to us – governments, UN, civil society, business, NGO's and youth – to drive momentum and discussions, build a greater sense of urgency and ambition to make Rio a success with a substantial agreement and concrete outcomes. It is a real chance to re-imagine our socio-economic systems, and the way in which they work in harmony with nature, to deliver greater well-being for all, now and into the future. But we must act decisively. We need to build a programme of commitments, actions and implementation worthy of taking forward the work started at the first Earth Summit in Rio 20 years ago.

Ours – future generations will surely decide – is the irresponsible generation. They will look upon 1992 to 2012 as a lost twenty years, during which we could have laid the foundations for a more sustainable world. Instead, we have increased unsustainable consumption patterns in developed countries and exported them to developing ones, with increasingly negative and destructive impacts on the world's environment and on poor people. We knew the problems, we knew most of the answers - but we failed to scale them up to deliver what was needed.

Our challenge now is to look at the possible outcomes from Rio and continue to drive discussions around them, ensuring a decisive and actionable agreement. The key possible outcomes that I would quickly like to highlight are spread across five key areas:

In the area of **Institutional Framework for Sustainable Development**, a number of ideas are on the table, including the upgrading of UNEP to increase its ability to deliver change, a new global institution for sustainable development to address Sustainable Development Goals implementation and emerging issues, and the establishment of a UN High Commissioner for Future Generations.

**Possible Conventions** being talked about for Rio+20 are: A global convention for Principle 10 of the Rio Declaration (access to information, public participation and environmental justice) and a convention on Corporate Sustainability, or better, a Convention on Corporate Social Responsibility and Accountability.



There is possible agreement surrounding the tabled idea of **global sustainable development goals**, similar to the MDGs, complementary not competing but universal, including issues such as energy, water, food security and oceans and seas, with the development of indicators and targets post Rio.

Discussions around the **Green Economy in the context of Sustainable Development and Poverty Eradication** have been extremely complex, but the focus on new ways of measuring socio-economic progress, which go beyond or replace GDP, and the amendment of the Santiago Principles to include sustainability criteria for the Sovereign Wealth Funds, are promising.

Finally, there is movement in the **review of previous commitments**, such as Agenda 21 and the Rio Declaration implementation, where the lack of finance to deliver them has impacted profoundly on the ability of developing countries to move their development model to one based on sustainable development.

Liz Thompson, The Executive Coordinator of Rio+20, at Saturday's Global Transition Dialogue on the New Economy, called upon us to now take action and do all we can to drive discussions at Rio. It is now down to all of us to make this is a successful summit and ensure that another 20 years are not lost. ■

## Sustainability Needs Cities

Chris Guenther

Senior Associate, SustainAbility, [www.sustainability.com/team/chris-guenther](http://www.sustainability.com/team/chris-guenther)

It is a widely-held view that progress on sustainable development has been too slow, and not adequate relative to the scale of the challenges we face. So the 'holy grail', for a growing cadre of sustainability advocates, is to drive the creation and implementation of solutions with ever-greater speed and scale.

But how do we do that?

Part of the answer lies in cities. On one hand, urbanization is itself a major challenge to global sustainability, but on the other, cities are key sources for the energy and innovative capacity needed to bring sustainability to scale.

This is the subject of a new paper, by myself and my colleague Mohammed Al-Shawaf, titled *Citystates: How Cities Are Vital to the Future of Sustainability*. [[www.sustainability.com/library/citystates#.T2YBS05y-3I](http://www.sustainability.com/library/citystates#.T2YBS05y-3I)] In it, we posit that sustainability needs cities as much as cities need sustainability – not only because they are a linchpin for the survival of our people and planet, but also a lever for shared progress and prosperity. Consequently, we argue that a greater share of sustainability effort should be focused and expended in the context of cities, in order to expand and accelerate progress on the agenda as a whole. We also hone in particularly on the role of global business, which faces ever-growing pressure to deliver social as well as financial value around the world, and which can contribute vital skills and resources to augment the effort of city governments and other stakeholders to drive urban sustainability.

At its core, *Citystates* identifies seven characteristics, or states, that we see as key to advancing sustainability both within and beyond the city, and asks what business particularly can learn and/or contribute to improve their potential:

- 1. The Connected City:** Both growing technological enablement and traditional social connectivity provide opportunities for greater awareness, trust and collaboration among stakeholders. How can business both bolster and create value from this essential connectivity?
- 2. The Decisive City:** Cities often have the urgency, remit and accountability to act decisively – for example, on mitigation and adaptation efforts related to climate change. How might companies improve their own decisiveness, and/or leverage that of cities, to drive sustainability?
- 3. The Adaptive City:** Cities are among the most adaptable structures in society. How can business both incorporate these adaptive characteristics while collaborating with cities on their mutual survival?
- 4. The Collaborative/Competitive City:** The healthy tension between peer-to-peer collaboration and economic and brand competition among cities has potential to drive precompetitive sustainable innovation and rapid diffusion of solutions. How might industries exploit this tension in their own parallel drive for sustainability and competitiveness?
- 5. The Visceral City:** Urban living is shaped by numerous real and potential feedback loops. As urbanization and its impacts rise and become more visible, awareness and urgency become more acute. How can companies leverage greater engagement to drive both value creation and sustainable development?
- 6. The Personal City:** The influence of shared identity and values – in cities and elsewhere – is a particularly powerful driver of individual and collective action. How can businesses effectively engage citizen-consumers' core values in order to change behavior and drive demand for more sustainable products & services?
- 7. The Experimental City:** Cities have inherent advantages to experimentation, like complimentary ecosystems for R&D and low barriers to entry for nontraditional actors. How can business embrace the growing democratization of innovation and leverage cities as laboratories to test and scale sustainability solutions?

In the end, we do not suggest that either the sustainability of cities or cities' positive influence on sustainability will be easy or certain. Rather, we suggest the possibility of a mutually beneficial relationship, and that, through focus and effort, we may begin to take advantage of it. The purpose of *Citystates* is to seed a dialogue, the central question of which is: how might business and others come together to strengthen and leverage the unique characteristics and advantages of cities to accelerate progress on sustainability?

We will continue to explore this topic throughout the year, including at an event to coincide with the Rio+20 summit in Rio de Janeiro in June. We look forward to continuing the conversation there and elsewhere, and hope you will join us. For more information, please **contact guenther@sustainability.com** or **al-shawaf@sustainability.com** ■

# Beyond green buildings: creating different ways of living

An interview with Pooran Desai  
co-founder of BioRegional

Improving the energy efficiency of buildings will not deliver the vital step change in carbon savings that we need for true sustainability unless wider societal change takes place, according to Pooran Desai, the co-founder of the organisation that was instrumental in delivering the UK's best known sustainable community Beddington Zero Energy Development (BedZED).

"If society is to successfully achieve meaningful improvements in sustainable living, while reducing greenhouse gas emissions, we need to look beyond what is being built and focus on creating different ways of living. Constructing greener buildings is only part of the solution," argues Desai.

## Societal change

"Current building regulations deliver reasonable levels of energy efficiency. Therefore, constructing to standards that are well beyond the minimum often does not deliver the environmental benefits that we might expect," Desai explains. "As an industry, we continue to overestimate the impact of buildings on greenhouse gas emissions and underestimate aspects such as transport, food, waste and behaviour. Although we must improve on them, current building regulations reduce emissions from space heating by almost 70% over a Victorian home. Code level 4 reduces space heating by a further 15% on this baseline, while the marginal benefit of progressing on to code level 6 is only another 5%, which in fact amounts to only about 0.5% of greenhouse gas footprint – into the realms of diminishing returns."

## Buildings in use

"In fact, regulations that focus on the building fabric and resulting emissions might be the best approach rather than wider codes, because the major part of emissions from buildings are not determined by what is built, but by how people choose to use the buildings. This could be from their choice of appliances to how they are used, both of which are areas that are not usually considered as part of the remit of building regulations or building standards. Instead these issues are viewed in the context of sustainable living, covering everything from food to recycling to transport. Behavioural change, or making it easy for people to lead sustainable lifestyles, needs to play

a key role in the way a building is occupied and utilised. Finally, the decarbonisation of the energy supply will need to be addressed if greenhouse gas emissions are to be reduced significantly. Ultimately, building codes are only useful to the extent that they support sustainable lifestyles."

## Different view

"What is needed is a way of looking at a new infrastructure for society that supports a different type of lifestyle. The built environment has an important part to play in achieving sustainable consumption, but focusing purely on the way a building is constructed and used sends misleading messages."

"Although I am a great supporter of building standards, if they are not viewed in context, they can misdirect effort. Achieving a BREEAM Excellent rating is a good idea and should be encouraged, but there is often little point in going the extra mile and gaining BREEAM Outstanding whilst lifestyle issues are not addressed," says Desai.

## Ecological footprint

Desai bases his observations on work undertaken at BedZED. Measurements of electricity consumption during the project showed an average of 45% lower consumption than surrounding buildings, and heating 81% less. By reducing car parking spaces and introducing London's first club car, surveys showed a 65% reduction in private car mileage.

At the time, there was a lot of debate surrounding the regeneration of the Thames Gateway, with some 200,000 homes forecast to be built. Desai and his team started mapping the environmental savings that could come from implementing the strategies taken at BedZED across the Thames Gateway. They also started using ecological footprinting as a headline indicator of sustainability, including food and waste impacts as well as carbon.

## Behaviour change

"By targeting CO2 savings in the planned new homes and by building to higher energy efficiency standards, a 32% reduction in CO2 emissions from the homes was achievable, translating to an overall reduction in ecological footprint of a shockingly low 4%. It was only when we started reducing transport, waste and food impacts, including behaviour change, that we really started to achieve some decent overall ecological footprint savings," says Desai.

"Yet, the development of sustainable communities remains dominated by green building design. We often hear statements such as 'our buildings contribute nearly half of all our CO2 emissions', followed by the assumption that we will make large environmental gains by constructing buildings to high environmental standards. This all leads me to the conclusion that as an industry, we continue to fail to appreciate where our environmental impacts arise from."



## Buildings versus what people do in them

To be effective, Desai believes we need to develop a better understanding of the relative contributions of building fabric versus appliances, food, transport, consumer goods, waste and the other parts which make up our lifestyles. The energy consumption in buildings is partly to do with what we build, and a growing part is what people do in those buildings – the domestic, commercial and industrial appliances which are fitted and how they are used. There is only limited value in considering the energy consumption from these appliances as part of the building. Desai suggests the following analogy: just because the majority of food is consumed in buildings, there is only a limited amount we can do in trying to drive sustainability of the food system through building design or standards. There is not much to be gained from saying buildings are responsible for 95% of impacts associated with food.

"Although it is essential that we make our buildings greener, particularly by refurbishing older stock, it actually won't reduce our overall environmental impact nearly as much as we might first assume," he says.

## GHG not CO2

Desai believes that we can start to unpick the confusion around CO2 emissions figures and how it relates to other measures such as greenhouse gases and ecological footprint. The most quoted government figures for CO2 emissions are what should really be described as "direct CO2 emissions" or "territorial CO2 emissions".

These figures represent the CO2 directly emitted by any region or country from the burning of fossil fuels within its own territorial boundaries. This amounts to around 8.8 tonnes of CO2 a person a year in the UK. However, the territorial CO2 emissions figures don't include international shipping or aviation which add a further 0.7 tonnes a person a year. Adding in the net impact of goods and services we import into the UK gives us a CO2 footprint of 12.08 tonnes.

Even this figure does not include the basket of greenhouse gases (GHG) such as methane and nitrous oxides in addition to CO2. The UK's GHG footprint is 16.34 tonnes of CO2 equivalent a person a year – 86% larger than the original territorial CO2 emissions figure of 8.8 tonnes. If territorial CO2 emissions are used as a guide, the global warming effect of emissions from imported goods, agriculture and international travel is underestimated, and the importance of fossil fuels burned directly, for example, to heat and power our buildings, is overestimated.

## Creating sustainable lifestyles

"If we look at ecological footprinting as the headline indicator of sustainability, things look even more different as our CO2 footprint accounts for only 65% of our ecological footprint. A person living in a home built to current building regulations might be releasing 1.5 tonnes of CO2 to provide their heat and power. This equates to 17% of territorial CO2 emissions, 12% CO2 footprint, 9% of GHG footprint but only about 6% of ecological footprint," explains Desai.

The necessary step change in environmental savings can only be made when society focuses on creating whole sustainable lifestyles – making it attractive and affordable for people to live without being dependent on cars, where recycling is made easy and where everyone has easy access to local, organic, seasonal produce – for which BioRegional coined the term One Planet Living. This framework is now being applied internationally to create communities focused on sustainable lifestyles not just green buildings, including the recently completed 172 apartment, car-free One Brighton development by Crest Nicholson and BioRegional Quintain.

Desai concludes by saying: "We need energy efficient buildings but we don't need to perform expensive engineering or architectural gymnastics to get decent savings, after which we can focus on other aspects of our lifestyles." ■

## MORE INFORMATION:

This article has been produced with the support of Skanska. Read more about how Skanska contribute to a more sustainable built environment

[www.skanska-sustainability-case-studies.com](http://www.skanska-sustainability-case-studies.com)

# Natural History Museums in a changing world

Bob Bloomfield

Head of Innovation and Special Projects, The Natural History Museum

The agenda of Rio+20 underlines three inexorably interlinked domains. These include how we adapt and mitigate the environmental changes caused by an increasingly human-influenced world, and how we ensure sustainable and equitable development for the wellbeing of people across the globe. The third and less recognised domain is that of biodiversity and its loss. Though often overlooked, this latter is actually the glue upon which the other two largely depend.

Here in the Natural History Museum, we are used to identifying and interpreting variation. Our 70 million specimens are a record of diversity and change over time, they are the evidence of natural variety and provide clues for human-influenced impacts. Looking at where specimens were collected in the past, and comparing this with what we see today, we can see the escalated patterns of change. These collections contribute to the weight of objective evidence, which we must respond to if we are to ensure the wellbeing of current and future generations of the human race.

Natural history museums are also some of the most fondly remembered places of childhood visits and are trusted places of learning, and we therefore feel a huge responsibility to share the implications of what our collections and science tells us. Museums are places which try to understand the past and to learn and share the lessons of today for the benefit of the future. This is why we are working with our partners the British Council and Stakeholder Forum to present the Earth Debates [[www.nhm.ac.uk/earthdebates](http://www.nhm.ac.uk/earthdebates)], in which we explore key issues underlying the Rio+20 agenda and the associated science and society issues.

It so happens that museums are also usually located in the heart of our urban environments, where today the majority of the world's population is now residing, with people often more removed from nature than ever. But biodiversity is not remote and abstract; it's about everyday life, such as the food we eat and the products we buy. We have direct impacts on natural systems through what and how we purchase, produce, consume and dispose of. Rather than seeing the loss of biodiversity as an environmental question, we need to see it increasingly as a mainstream one, it is as much about how we manage production processes, and how we recycle as it is about how we make space for nature. Biodiversity, the variety of life, is of course organised into ecosystems and it is these that ensure fertile soil and clean water and air. In the past we have tended to see nature in cities as places just for recreation and pleasure, and indeed these are profoundly important, but this is not the whole picture. There is now a growing understanding that nature must be



part of a city's core infrastructure; for example, trees filter the air of damaging particles from traffic, and greenery properly incorporated, helps store water, reducing the risks of flooding and providing resilience during droughts, thus making nature part of a city's protection against increasing environmental hazards. In a similar way, the cooling influence of trees and green roofs reduce the 'heat island' effect and significantly lower a city's temperature, with positive benefits for health. Many green spaces can foster hobbies, encouraging community spirit, and increasingly they can also provide valuable locally grown produce and help recycling of organic waste.

In fact perhaps the biggest lesson is to see the natural world and its biodiversity as a key asset and ally for the future. In an increasingly globalised world, natural history collections tell us another thing: historically cities have emerged in the most fertile places, such on estuaries where land, fresh water and oceans meet. These are the places which were also most biodiverse. Today with large tracts of agricultural land given over to just a few human-utilised species, our urban environments are becoming hugely important for biodiversity again, as they can provide a range of new habitats in which struggling species can find a place to live. These key messages for the future – learning from and mimicking the lessons of nature to help us become more sustainable; treating nature as a friend and ally, and making space for nature in urban environments – will serve both people and the environment for generations to come. ■

# Cities – why understanding their governance is key to sustainability

Paul Toyne

Head of Sustainability, WSP Group

It is widely recognised that the rate of urbanisation in the next 40 years is equivalent to development of the last 4000 years. The sheer pace and scale, combined with challenges such as: an increasing population, rapidly increasing urbanisation, the need to adapt to a changing climate and growing resource constraints, is forcing us to rethink our strategies for the built environment. Ultimately, this means that the cities of the future won't be designed as in the past. We are going through a huge learning phase to meet these challenges, be it the restoration of existing cities, or designing the expansion of old or entirely new cities. But first, we must explore how cities operate and how this will affect their future development.

## The governance of Cities

Understanding how cities are managed is key to designing and operating them. Cities will have their own objectives based around economic, social and environmental goals (and political ideals), but in general, cities are large densely populated areas where utilities, transport, real estate/property and city services all come together to provide citizens with a safe place to live, work and socialise. Realising how a city works - it's different structures: legal (laws, bye-laws and permissions), planning (a variety of policy frameworks), financing (taxes, levies and subsidies), the market (how it procures goods and services) - is crucial to re-engineering the future city, regardless of whether it is a city in a developed or developing country.

Herein lies the problem; as there is no overall model of governance for cities and, by their very nature, cities are chaotic constantly changing places. The control and management of services such as water, waste, sewage, power, telecommunications, roads and green spaces will vary. Some will be under the control of the municipality, others under the control of private firms, or a mixture of public/private ownership.

In developing countries, much of the city growth will be of an informal nature and outside established governance structures altogether. Creative options for alternative infrastructure, provision of basic services and community-based governance are likely to be important in many of the cities of the future.

Once the governance has been unravelled, it is then possible to focus on how best to manage individual issues, and the interlinkages between them. Some of the key issues that need to be assessed for their connection and combination are power generation (heating, cooling and lighting of buildings), transport, food production, water and waste.

## Timing and integration is key too

The key to these improvements however is of course timely and integrated investment. Any investment needs to be timed to deliver the best 'future-proof' result. For example, when designing energy systems, a flexible approach allows for future adaptation to different fuel sources as the city transitions to a low/zero carbon economy. As we move through the learning curve, we are beginning to develop 'closed-looped' thinking, by taking integrated approaches in linking issues, such as waste and water. With a more enhanced understanding of how these challenges are related, cities can start to develop a more holistic strategy. The technical solutions are now at hand, the great challenge now is to engage city governments, institutions (including financial) and the public, in order to implement a transition to the development of green cities.

## The importance of cities for Rio plus 20

Given that more people live in cities than ever before and the challenges of managing consumption habits and natural resources, the development of cities must be central to discussions at Rio+20 in June. The restoration of existing cities and the design of new cities, offers huge opportunities in striving towards energy, waste and water neutrality. The associated jobs would stimulate a green economy, and those employment opportunities, coupled with green buildings and the establishment of affordable public transport networks linking to places of work, entertainment and other services, will help the health and well-being of citizens and the vibrancy of cities. ■



# profile. Thomas Elmqvist

**Nationality:** Swedish

**Country of residence:** Sweden

**Current Position:** Professor at Stockholm University

## How did you get the role you are in today and what advice would you give to aspiring earth champions?

Through my research career, I am driven by my curiosity in understanding human impacts on the planet and how we can build strategies for better stewardship of ecosystems. I am fortunate to be part of the global movement linking our deeper understandings of the functioning of ecological systems with that of social systems; and I now to realize how little we know of the dynamics of the linked social-ecological system. This area will be crucial to explore in the future. And something for aspiring champions to focus on.

## Looking specifically at your work, why is research into green cities so important?

By 2050, almost 3 billion additional people will inhabit the world's cities, and the world will have undergone the largest and fastest period of urban expansion in all of human history. A recent estimate reveals that the area directly affected by new urban infrastructure within the next 40 years will cover an area roughly the size of France, with obvious impacts on natural habitat and the wildlife that depends on it. Consequently, urban growth will affect the provision of many ecosystem services and the benefits humans derive from nature, and the demands of cities will reshape most rural landscapes in the coming decades. In ecology there is now a growing understanding that human processes and cultures are fundamental for sustainable management of ecosystems, and in urban planning it is becoming more and more evident that urban management needs to operate at an ecosystem scale rather than within the traditional boundaries of the city.

## What role does the development of green cities have in Rio+20?

Over the last few decades there has been increasing recognition that human domination and the rapid development of global urbanism are reshaping the ecology of our entire planet. This rapid urbanization represents major challenges, but also opportunities to ensure basic human welfare and a viable global environment. The opportunities lie in the urban landscapes because these are also the very places where knowledge, innovations, and the human and financial resources for finding

solutions to global environmental problems are likely to be found. This also highlights the importance of local and regional governments in the implementation of UN decisions and adoption of UN strategies for sustainable development. The local scale is often the most important scale of action and it is necessary that more efforts and resources are allocated for local implementation.

Without adequate consideration by policy-makers looking at the implications of the coming urbanization, many of the goals of the Convention on Biological Diversity, as well as the Millennium Development Goals for providing clean water for consumption and sanitation, and the UNFCCC goals for mitigating and adapting to climate change, are unlikely to be met. A sustainable urbanization will be necessary for achieving goals of a more sustainable planet. There is a particular need to understand how urban regions may contribute to create incentives for better stewardship of distant landscapes, which generate many of the ecosystem services consumed in cities.

## What do you believe should be achieved at Rio+20?

A roadmap for a new set of sustainable development goals which will help governments at all scales to take significant steps towards sustainability and being able to measure the magnitude of those steps.

## How important is the Rio+20 process and what do you think the priorities for action should be in 2012 in the run up to the summit?

It is a crucial step and governments should engage in developing the framework for the new set of sustainable development goals. In this context not only national governments, but also local governments and local communities will play an important role. There should be a clear mechanism for how local actors can be involved in the Rio+20 process.

## Favourite quote:

"The earth has enough to provide for every man's need, but not for every man's greed". (Mahatma Gandhi 1955) ■

# Rio+20 Side Event Calendar

Date	Time	Room	Title	Organizers
19/03/12	9:00-1:00	North Lawn Building	The Rio 20 Major Groups/Civil society Capacity building workshop	The UN Department of Economic and Social Affairs (UN DESA) and Stakeholder Forum for a Sustainable Future
19/03/12	1:15-2:45	Eco	Socio-Environmental Protection Floor	Brazilian Government – Ministry of Social Development and Fight against Hunger (MDS)
19/03/12	1:15-2:45	B	20 Years of the Rio Conventions: Opportunities and Challenges for Synergies	Secretariat of the Convention on Biological Diversity (CBD)
19/03/12	6:15-7:45	B	The Role of Technology in the "Green Economy" and the need for Technology Assessment / Rio+20 – A Global Innovation Summit?	Action Group on Erosion, Technology and Concentration (ETC Group) Academic Council on the United Nations System (ACUNS)
19/03/12	6:15-7:45	A	Creating a more effective system of environmental and sustainable development governance	Association of World Citizens and the World Alliance to Transform the UN (WATUN)
20/03/12	1:15-2:45	Eco	The Sustainable and Just City	Ford Foundation
20/03/12	1:15-2:45	B	The Role of Major Groups in a future Sustainable Development Council and UN Environment Organization	CIVICUS
20/03/12	1:15-2:45	7	Achieving Green Societies through Education for Sustainable Development (ESD)	UNESCO (on behalf of the UN Inter-Agency Committee for the UN Decade of Education for Sustainable Development (IAC/DESD)
20/03/12	6:15-7:45	B	Key Messages of Indigenous Peoples for Rio +20	Tebtebba (Indigenous Peoples' International Centre for Policy Research and Education)
20/03/12	6:15-7:45	7	Science messages for Rio+20	The International Council for Science (ICSU)
21/02/12	1:15-2:45	B	Bringing Rio Principles back to Sustainable Development Agenda at Rio+20	Gorakhpur Environmental Action Group (GEAG) in collaboration with PAIRVI Associates & CECOEDECON
21/02/12	1:15-2:45	A	Importance of Science in Policy for Sustainable Development	DTIE/UNEP & Government of Germany (TBC)
21/02/12	6:15-7:45	B	Rights for Sustainability and Sustainable Development Governance	IBON International and Both ENDS
21/02/12	6:15-7:45	7	Role of communications and media in Rio+20	DPI (TBC)
22/03/12	1:15-2:45	Eco	UN Country-level experience in supporting Rio+20 themes	UNDG Task Team on Environmental Sustainability, Climate Change and Rio+20
22/03/12	1:15-2:45	A	Special Event on Occasion of World Water Day	DPI & UNSGAB (TBC)
22/03/12	1:15-2:45	7	A Roadmap for Ocean Sustainability	Pew Environment Group on behalf of the High Seas Alliance
22/03/12	1:30-3:00	Plaza Room, UN Church Centre	H2Uh-0: The Rights and Wrongs of Water in Rio+20	Franciscans International
22/03/12	6:15-7:45	7	Agriculture at Rio+20: What should be decided – and what kind of agriculture should be promoted?	Biovision, Millennium Institute, and the More and Better Network
22/03/12	6:15-7:45	Eco	Green Economy in the Context of Sustainable Development and Poverty Eradication: Sharing National Experiences on Frameworks for Action	UNEP, UNDP, DESA
23/03/12	1:15-2:45	Eco	Towards the people's Summit at Rio+20: Alternative civil society perspectives on the zero draft	UN-NGLS & Social Watch
23/03/12	1:15-2:45	B	Planetary and social boundaries: a framework for Rio+20 and Sustainable Development Goals?	Oxfam, Sustainlabour, Vitae Civis

# SUSTAINABLE + JUST CITIES

## STRATEGIES FOR IMPLEMENTATION

## Cities Will Play a Fundamental Role in Sustainable Development

Tuesday, March 20, 2012 | 1:15pm - 2:45pm

ECOSOC Chamber, North Lawn Building

Presented by



Now that more than half of the world's population lives in cities, sustainable urbanization is an important new opportunity for the UN's efforts to advance sustainable development. The purpose of the Sustainable and Just Cities forum is to ensure that sustainable and equitable urban development strategies are a core focus for the 2012 Rio+20 Conference and future UN initiatives. The world's mayors and other urban leaders are poised to provide crucial leadership and therefore must be at the heart of the formal agenda for the Rio+20 Conference. Their role and participation in future intergovernmental mechanisms should be a high priority for the Rio+20 Conference and for the world's heads of state, environmental ministers, civil society organizations and business leaders.

Cities are critical to the planet's transition to a green economy that increases opportunities, reduces poverty, and fosters a more sustainable future. Since the first Earth Summit in Rio in 1992, urban populations have increased by more than 1 billion and now, for the first time in history, more people live in cities than in rural areas. By 2050, the world's population is projected to increase from 7 billion to more than 9 billion people, roughly 70% of whom will reside in urban regions.

Growth and migration patterns represent a set of critical opportunities and challenges for sustainable development. On the one hand, cities are the centers of social and economic

activity and attract people seeking to attain a better life. Indeed, the world's top 50 metropolitan regions are economic powerhouses, accounting for just 12% of the planet's population, yet generating roughly 46% of global GDP. However, cities also consume more than 75% of the world's natural resources, use approximately 75% of the world's energy, and are responsible for 75% of its carbon emissions.

As more cities experience very rapid growth, many are struggling to provide adequate infrastructure—housing, water, sanitation and transportation—for their residents. Since 1992, the number of slum dwellers has grown from roughly 660 million to nearly 1 billion. Put simply, the way we collectively address these challenges will define the fate of billions of people and the sustainability of the planet. Rio+20 offers the opportunity to harness widespread interest in sustainable and inclusive urbanization to produce multinational commitments and scalable action. Already, robust leadership is emerging from mayors and other local officials. The need for local action was recognized at the inaugural Earth Summit in the form of Agenda 21, which acknowledged that many global challenges “have their roots in local activities.” While many local authorities adopted Agenda 21 and other sustainability commitments, most cities have not fully embraced their vital role in “educating, mobilizing, and responding to the public to promote sustainable development.” ■

To review a summary of submissions developed by Ford Foundation grantees for inclusion in the formal agenda for Rio+20, visit [www.uncsd2012.org/rio20/index.php?page=view&type=510&nr=696&menu=20](http://www.uncsd2012.org/rio20/index.php?page=view&type=510&nr=696&menu=20)

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